**Red text means it works as expected**

**Blue text means there are bugs or unexpected behaviour**

**Black text means the function was not tested (not counting BUGs)**

**Suggested Changes:**

1. For the unsaved changes prompt, consider adding a “Save and continue” option to the existing “Cancel” and “Discard” Options. Consider changing “Discard” 🡪 “Discard unsaved changes.”
2. Inserting new .json and .h5 files into rows is difficult, as it requires double-clicking and then clicking away or pressing enter. Consider changing this to just a double-click or click + enter.

**Shot Runner Tool UI**

1. File Menu:
   1. New file
      1. Ensure that it will create a new json file with the correct file name
      2. Ensure that the GUI will open a warning dialog box if the user tries to create a file with the same filename as a file that already exists

**BUG:** When replacing an existing file with a new one (creating new file with the same name as an existing one), no new file is created and the current file in use is closed.

* + 1. Ensure that the GUI will open a warning dialog if the user tries to create a new file while there are unsaved changes in the current file
    2. Verify that the GUI will raise a warning if there is a file lock on the json file

**BUG:** When replacing a file that is currently in use with a new one (using a second runner tool), no new file is created and the current file in use is closed. No file lock issue is raised through the GUI either.

* + 1. Test that cancelling the operation works as expected
  1. Open file
     1. Ensure that the runner tool will open a .json file.

**BUG:** Able to open (maybe? Impossible to tell because the data remains unchanged) the same file you already have open.

**BUG:** Current file name is not displayed at the top of the UI. Always displays “QDG Lab Shot Runner Tool.”

* + 1. Verify that a warning dialog will pop up if there are any unsaved changes.
    2. Verify that the GUI will raise a warning if the user attempts to load an invalid (corrupt or misnamed) .json file. Verify that both options (Discard and Cancel) work as expected for the warning box.
    3. Verify that the GUI will raise a warning if there is a file lock on the .json file

**BUG:** Tool does not warn if there is a lock on a .json file when opening it (ie. it’s open in another runner) and actually opens the file even when it’s already in use.

* + 1. Test that cancelling the operation works as expected
  1. Save file
     1. Ensure that saving a .json file works as expected.
  2. Save as
     1. Ensure that the save as function will save the changes to the new file specified.
     2. Verify that the original file will not be changed.
     3. Ensure that save as will open a warning dialog box if the runner tool attempts to overwrite a file that already exists. Verify that both options (Discard and Cancel) work as expected for the warning box.
     4. Test that cancelling the saving operation works as expected
  3. Close
     1. Ensure that the file will be closed.
     2. Verify that a warning dialog will pop up if there are any unsaved changes. Ensure that both options (Discard and Cancel) work as expected for the warning box.
  4. Exit
     1. Verify that a warning dialog will pop up if there are any unsaved changes. Verify that both options (Discard and Cancel) work as expected for the warning box.
     2. Verify that the UI will exit.
     3. Verify for both the ‘X’ in the top right corner and the exit button in the file menu.

**BUG:** The prompt to save unsaved changes does not appear when using ‘X’ to exit from the program.

1. Run Button:
   1. Ensure that the run button will run the scripts in the correct order with the correct settings files (From top to bottom of the list of scripts).
2. File name test cases – For New File and Save As functions
   1. Test the runner tool with filenames with no explicit extension
   2. Test the runner tool with the wrong file extension.
3. Warning and dialog boxes.
   1. Ensure that the warning messages make sense.
   2. Verify that both the option buttons work as expected
4. Multiple runner tools open at the same time
   1. Ensure that the tool raises a warning dialog if the user tries to open an .json file that’s already in use.

**BUG:** Tool does not warn if there is a lock on a .json file when opening it another runner and actually opens the file even when it’s already in use.

1. Test the buttons in various configurations and orders
2. Row menu
   1. Ensure that new rows can be added by linking .py and .h5 files to the script list.

**BUG:** Adding .py files successfully adds a row, but adding .h5 files does not. Intended feature?

* 1. Ensure that rows can be deleted

**BUG:** Rows cannot be deleted once added.

* 1. Ensure that the left column prompts the addition of a .py file and the right column prompts the addition of a .h5 file.
     1. Verify that cancelling the addition of either file does not alter the Runner tool script list, and that adding a new file adds a new row with “<Click to add row>” set as the default message.

**BUG:** Cancelling the addition of a new .py file stills shifts the script list down a row and adds a new row, but cancelling the addition of a new .h5 file does not.

1. UI Script Movement Buttons (Up arrow & Down arrow):
   1. Ensure that script movement buttons work as expected (ie. list is shifted according to desired adjustment of script run order).

**BUG:** Script movement works, but moving multiple rows at once does not behave as expected. Consider enabling multiple rows to be moved simultaneously.